

## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <a href="http://about.jstor.org/participate-jstor/individuals/early-journal-content">http://about.jstor.org/participate-jstor/individuals/early-journal-content</a>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

## SCIENCE

Friday, November 14, 1913

## CONTENTS

National Academies and the Progress of Research: Dr. George E. Hale	681
The Baltimore Meeting of the National Academy of Sciences	698
Scientific Notes and News	700
University and Educational News	701
Discussion and Correspondence:—  Absorption of the Sun's Energy by Lakes:  PROFESSOR E. A. BIRGE	702
Quotations:—  Special Training for Health Officers; Pensions at Brown University	704
Scientific Books:—  Allen's Commercial Organic Analysis: Professor Otto Folin. Talbot's House Sanitation: Professor CE. A. Winslow	<b>7</b> 05
Cooperative Investigation of the Mississippian Formations: F. W. DE Wolf	706
Special Articles:—  On the Acoustic Efficiency of a Sounding Board: Professor Frank P. Whitman	<b>7</b> 07
The American Chemical Society: Dr. Charles L. Parsons	<b>7</b> 08

MSS. intended for publication and books, etc., intended for review should be sent to Professor J. McKeen Cattell, Garrison-on-Hudson, N. Y.

NATIONAL ACADEMIES AND THE PROG-RESS OF RESEARCH

## I. THE WORK OF EUROPEAN ACADEMIES

THE Academy of Plato, who bequeathed to his followers the walled garden and appointments in the place named after the hero Hekademus, was at once a school of instruction and a society for the development of new knowledge. Here he discussed his philosophy with associates and students, while it was still in the making, thus bringing them under the stimulating influence of fresh thought, developing and expanding from day to day. Writing of the Old Academy, which included the schools of Plato and his immediate successors, Cicero remarks:

Their writings and method contain all liberal learning, all history, all polite discourse; and besides they embrace such a variety of arts, that no one can undertake any noble career without their aid. . . . In a word the academy is, as it were, the workshop of every artist.

The Old Academy was thus the predecessor of our modern academies of science and of our universities as well. Its world-wide influence, while of course primarily due to the brilliant thinkers of the day, may certainly be ascribed in part to the fact that its instruction was given in an atmosphere charged with the stimulus of original thought and constantly broadening ideas. The great success of the German universities, and the outflow from them of the spirit of research into every phase of German life and thought, is undoubtedly due in the largest measure to the application of this principle. Fortunately for the intel-

<sup>1</sup> Cicero, "De Fin.," Vol. 3, as quoted in the Encyclopædia Britannica, 11th edition, Vol. 1, p. 106.